13 were rejected on the basis of prior art. Claim 10 was indicated as having allowable subject matter but was objected to on the basis that it depended on a non-allowed claim.

Claims 1, 3, 4, 7-9, and 13 were rejected under 35 U.S.C. 102(b) as being fairly anticipated by the newly cited U.K. Patent application 2,045,206.

Then, Claims 1-9 and 13 were rejected under 35 U.S.C. 102 as being fairly anticipated by Eckloff, et al.

Claims 1-9 and 13 were then rejected on the basis of 35 U.S.C. 103(a) as being unpatentable over the U.K. Patent application 2045206 or the newly cited Schmitz reference (U.S. 5, 035,336) in view of Schaller (U.S. 4, 662,526).

Further, Claims 1-9 and 13 were rejected under 35 U.S.C. 103(a) as being unpatentable over the British reference 2111017 in view of Schaller.

Reconsideration is requested. Let us first direct our attention to the British reference 2045206. In making that rejection, there is a brief explanation of its relevance, and this appears in Section 4 of the last Office Action as follows:

> "Note the mechanism can be steered by wheel 65. When the mechanism is pulled right or left by wheel 165 the rear wheel serves as a pivot. This motion is like that of a standard floor jack."

Let us now turn our attention to the subject matter of the present invention and specifically to Fig. 1 of the present patent application which shows the pivot support in the form of a post 28 which extends downwardly to engage the lower support surface 33. The function of this pivot location can be appreciated in the examining Figures 3A and 3B of the present application where in Fig. 3A, the lifting assembly of the present invention is located over the manhole cover 12,

and after it is lifted, the assembly is rotated about the pivot location (indicated at 24 and Figure 3B) away from the manhole itself. Then as explained in the present patent application, after the work has been done relating to that particular open manhole 14, then it is a very simple matter to rotate the lifting assembly about the pivot location 24, back to its position over the manhole. Thus, the manhole cover 12 is automatically properly positioned over the manhole.

Now let us look at the language in the claims which deals with this particular limitation, this being in sub-paragraph ii under Paragraph a) in Claim 1. It should be noted that this claim 1 is now amended so that this particular paragraph ii reads as follows:

> "a pivot support connected to the beam structure and located at the pivot end thereof, and arranged to support the pivot end of the beam structure from the base surface and to engage the base surface in a manner to resist movement of the pivot support from a substantially stationary base surface pivot location on one side of the object to be lifted during movement of the lifting assembly;"

This language cannot be interpreted to read on either of the wheels 50 or 51 of the British reference. In column 1, second page, beginning on line 36 of the British reference we find the following language describes how the cover is removed:

> "Once raised to a position to above the level of the edge of the support structure 11, an operator can move the whole device with the manhole or inspection cover attached to it away from the hole. The handle 66 is used for this and also provides steering for the wheel 65. The width between the wheels 50, 51 is sufficient to clear the edges of the hole. The device may be moved forward or back and can be easily moved to any desired position."

This language clearly indicates that neither of these wheels 50 or 51 is intended to function as a pivot location constrained to remain at a stationary location. In fact, the only time one of the wheels 50 or 51 would be stationary at a single location is in the instance that the operator carefully steers the front wheel so that its axis of rotation remains directed toward the location of the rear wheel 50 or 51 which is to remain stationary. Then this would not be achieved by constraining the pivot support.

The wheel arrangement shown in this British reference is no more than the arrangement that would be in a tricycle, where the person riding the tricycle would have two rear wheels having a fixed axis of rotation and a front steering wheel. It will also be noted that in column 2 of page 1 of the British reference, beginning on line 120, where it states on line 123 that the two wheels 50 and 51 are "non-steerable wheels".

Now that we get past the point that the configuration of British Patent application 2045206 does not read on Claim 1 in its presently amended form, the question becomes whether it would be obvious to make one or the other of those wheels 50 or 51 a pivot location as recited in Claim 1. Again, the answer is in the negative, and this becomes clear when we read the purpose and function of the wheel configuration in this British Patent application. Again, we go back to the language from this application that was quoted earlier in these remarks, wherein column 1 of page 2, beginning on line 44, where it states that:

> "The device may be moved forward or back and can be very easily moved to any desired position."

Making one of the wheels 50 and 51 as a pivot support having a substantially stationary location would totally frustrate that function. Accordingly, not only

would it not be obvious to make that modification, it would be totally antagonistic of the teaching of this British Patent application.

Let us know consider the Schmitz Patent, US 5,035,356. This is even further removed from the present invention. The frame 12 that provides the support for the apparatus is mounted on four wheels arranged in a rectangular configuration. These are discussed in column 3, beginning on line 29 as follows:

> "In accordance with the referred construction, the manhole cover lifter 10 is support on wheels 58. The wheels 58 are preferably non-castering or swiveling wheels, so that the frame 12 can be guided along a straight line toward and away from the manhole 14 in accordance with the slope of the street surface 16 for maximum control."

Therefore, it is quite evident that to attempt to modify Schmitz, et al. and to arrive at the present invention would be totally antagonistic to the intended functioning in the Schmitz, et al. apparatus.

Also, in the last Office Action, the Schmitz Patent was cited in conjunction with the Schaller, (U.S. 4, 662,526), and also, the British Patent application 2045206 was also combined with Schaller to make a rejection of the claims.

The possible relevance of the Schaller Patent has been discussed extensively during the earlier prosecution of this application, but for the benefit of the examiner, the main arguments will be repeated below:

The Schaller patent is directed toward the problem encountered in removing the cover of an electric arc furnace. In reading the section under "Description of the Prior Art", it points out that the gantry arm that extends over the furnace is exposed to a temperature of approximately 400 degrees C which can cause deformation and damage to the hoist mechanism, particularly in the

joints. The entire thrust of this patent is to alleviate this problem. In the first sentence under "Summary of the Invention" (column 1, beginning on line 46), the text reads as follows:

> "The object of the present invention is, therefore, the provision of a hoist mechanism for a cover for an electric arc furnace which is relatively immune to heat and the effects of electric current."

If one reads through the rest of column 1 and to the top column 2 of this Schaller patent, it will be seen that there is a system described where cooling fluid surrounds the pulling or hoisting rods and the hoisting piston cylinder mechanisms. The gantry arms of the invention and transverse bars are provided with fluid-type connectors for a cooling fluid. Then in column 2, line 7, we find the following sentence:

> "The protective pipes will thus operate at a temperature of the coolant and can be kept below a temperature of approximately 50 degrees C without any difficulty. The fact that this temperature may be kept down to this degree is particularly important for the hydraulic hoisting mechanism."

It happens that in this particular design of Schaller, the entire mechanism has a base 4 with a pivot location 20 and two wheels 21. The only mention that is given to this particular arrangement is a ten-word sentence that appears in column 2, beginning in line 66 as follows:

> "The gantry 14 is arranged about support pin 20 on wheels 21."

That is the total teaching of the Schaller Patent that could conceivably be considered relevant to the present invention.

There was absolutely no teaching in the above-noted British reference, nor on the Schmitz, et al. reference that a person should go very far afield to find a particular type of mechanism for moving a lid on and off an electric furnace. If

a person were given either the British or Schmitz et al. patents, and asked to make some kind of improvements, the odds are infinitesmal that the person would seek out the Schaller Patent in that unrelated technology and try to reconstruct the wheel configuration of either the British reference or Schmitz, et al. to arrive at the present invention.

In the most recent Office Action, it is stated in section 13 as follows:

> "Applicants' argument regarding Schaller being from non analogous art and lacking a teaching has been carefully considered but is not deemed persuasive. Schaller deals with the same problem as British reference 2111017, i.e., the removal of a cover."

With all due respect to the examiner's position, simply because both deal with a cover does not mean they are analogous arts. The task of taking a cover off of an opening and replacing it exists in practically every field of endeavor, whether it be opening the hatch on a boat, opening the lid on a jar of jam, capping an oil well, opening a hatch in a space station, etc. That does not make all of these arts analogous. There is no area of technology or industrial application which simply relates to removing and installing covers, whether it be in outer space, under the ocean, in a kitchen, or wherever. Thus, the technology dealing with electric furnaces is very far removed from that of the task of removing and replacing manhole covers.

Accordingly, it is respectively submitted that the combination of the Schaller reference with neither the Schmitz reference or the British reference is totally inappropriate.

Also, in the last Office Action, there is a rejection on the basis of the British reference 2111017 in view of Schaller. This was discussed previously in other responses made by the undersigned. The same arguments apply that there is

no linking reference that would lead anyone to combine these two references. In fact, the British reference, which is totally devoid of any means of mobility, would even be further removed than the Schmitz or the other British reference.

Finally, we arrive at the rejection based on Eckloff. In the earlier prosecution of this application, the documentation which provided that clearly establishes the fact that the invention described in the present patent application was reduced to practice well before the filing date of the Eckloff patent. However, it was stated by the examiner that establishing the earlier filing date would not be appropriate since these two patents should be made to subject to interference proceeding. In order for an interference proceeding to be initiated, it would be necessary that there would be a common count. The Eckloff Patent issued with two parent claims (i.e., Claims 1 and 4). These claims contain limitations which are not even present in the present application. More specifically, the last two paragraphs of Claim 1 of the Eckloff Patent reads as follows:

> "wherein said securing means comprises an elongated threaded member extending vertically through an opening in said elongated member at a location between said first and second means and mounted on said elongated member for rotation into threaded coupling with a threaded opening of the cover to secure the cover therewith, the portion of said threaded member above the elongated member
>
> comprising a device adapted to be engaged by a tool for rotating the threaded member in first and second angular directions, and

wherein said opening in said elongated member comprises a slot for

> longitudinally adjusting the position of the threaded member on said elongated member, a bearing means having a dimension greater than said slot coupled to said threaded member for reducing the turning forces needed to rotate the threaded member mounted on said elongated member and for distributing the weight of the cover to said elongated

member when the cover is raised and supported by the threaded member."

This language refers to the attaching elements shown in Fig. 6 of the Eckloff et al. patent where there is an elongate threaded member 52 that can be threaded into a coupling 66, and with the threaded opening 64 which is able to receive the threaded member 68. Further, there is recited the upper slot 51 for longitudinally adjusting the position of the threaded member 52 on the elongate member 20 and a bearing means, which is the thrust bearing 60 for reducing the turning forces needed.

It is abundantly evident that these elements recited in the last two paragraphs of claim 1 of Eckloff et al. are not present in any way in the specification and drawings of the present application. Thus the Applicants have no right to copy Claim 1 of Eckloff et al. in the present application.

Next we turn our attention to the second independent claim, which is claim 4, and the last two paragraphs of that patent read as follows:

"an elongated member for supporting said securing means above the cover and being supported by and coupled to said first and second means so that he cover and said first means are moveable through arcs about a vertical axis located outside the periphery of the manhole, means for maintaining the cover at the same angular position relative to the elongated member during the raising and horizontal moving of the cover and

wherein said last mention means includes a pair of rod members spaced from each other and coupled to said elongated member and extending below the bottom of the elongated member, a spring bias means biasing said rod member against the elongated member to extend below the bottom of the elongated member so that when raised the cover top engages the bottom of said rod members

against the spring bias to prevent rotation of the cover relative to the elongated member."

This refers to the device shown in Fig. 7, designated generally by numeral 72, where there is a pair of rod members 74 which are coupled to the elongated member 20 and extend below the bottom of the elongated member 20. There is a spring bias means 80 biasing each rod member 74 against the elongate member 20 to extend below the bottom of the elongate member so that when raised, the cover top engages the bottom ends of the rod members 74 against the spring bias 80 to prevent rotation of the cover relative to the elongated member 20. Again, it is abundantly evident that it is impossible for the Applicants in the present invention to make any claim to the apparatus claimed in claim 4.

The Applicants are willing to concede that whether or not the Applicants can claim prior inventorship over the inventors of U.S. 5,674,045 (Mr. Eckloff and Mr. Pettesch), Mr. Eckloff and Mr. Pettesch are fully entitled to the patent protection which they have in U.S. 5,674,045. There is nothing in the present application which could suggest that these particular devices recited in claim 1 and claim 4 of Eckloff et al. would be obvious in view of the subject matter of the present application (assuming it were cited as prior art either by itself, or in combination with other patents). In short, the Applicants have no dispute with Mr. Eckloff or Mr. Pettesch and have no desire to enter into a contest with them to establish priority inventorship. This is the reasoning why the Applicants herein simply wish to establish inventorship prior to the filing date of the Eckloff et al. patent, so that there would not be a rejection under 102(e), which reads as follows:

"(e) the invention was described in a patent granted on an Application or patent by another filed in the United States before the invention thereof by the Applicant for patent, or an international application by another who has fulfilled the requirements in paragraphs...etc."

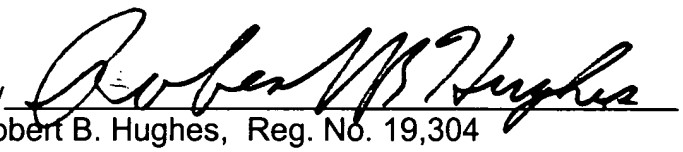
Following this Remarks section and attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

Accordingly, it is respectfully submitted that the application is in condition for allowance. If there is any matter which the examiner feels could be expedited by consultation with the Applicant's attorney, such would be welcome. The Applicant's undersigned attorney can normally be reached at the telephone number set forth below.

Signed at Bellingham, County of Whatcom, State of Washington this April 15, 2002.

Respectfully submitted,

ALVIN L. NEELEY,

By 

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Claim 1 has been amended as follows:

1. (Amended) A lifting assembly arranged to lift an object which has a width dimension and is at least partially surrounded by a base surface which has a substantial horizontal alignment component, such as a manhole cover surrounded by a paved or ground surface, said assembly comprising:

a) a base support assembly comprising:

i. a beam structure which has a lengthwise axis, is adapted to be positioned above the object, and has a length dimension greater than the width dimension of the object, said beam structure having a first pivot end and a second mobile end spaced from one another a sufficient distance so that the beam structure can be placed over the object to be lifted, with the first and second ends engaging the base surface in load bearing relationship on opposite sides of the object to be lifted, said beam structure being the primary load carrying structure relative to the object to be lifted;

ii. a pivot support ~~connect~~ connected to the beam structure and located at the pivot end thereof, and arranged to support the pivot end of the beam structure from the base surface ~~at~~ and to engage the base surface in a manner to resist movement of the pivot support from a substantially stationary base surface pivot location on one side of the object to be lifted during movement of the lifting assembly;

iii. a mobile support connected to the beam structure and located at the mobile end thereof, and arranged to support the mobile end of the beam structure ~~form~~ from the base surface on an opposite side of the object to be lifted, said mobile support having a mobile base

surface engaging portion to enable the mobile support to be moved laterally over the base surface;

b) a lifting mechanism mounted to the beam structure between the pivot support and the mobile support and comprising a lift connection to engage said object and an actuator acting through said lift connection to lift said object whereby said lifting assembly can be positioned over said object with the pivot support being on one side of said object and the mobile support being on an opposite side of said object, so that said lifting mechanism is able to raise said object, and the mobile support of said lifting assembly can be moved laterally so as to move said object about said pivot support.